

ABSTRACT OF THE DISCLOSURE

A layout capable of placing a circuit constituted by a plurality of transistors in a small-width region is automatically formed. A search section inputs data on a circuit and makes  
5 a search for a set of routes formed so that passage through any one of the transistors occurs only one time and so that the combination of routes in one set can cover the entire circuit network. An extraction section extracts a set of routes having the smallest number of routes in sets of route found by searching.  
10 A width determination section determines the layout width from the widths of source and drain electrodes of each transistor, the width of the region between the source and drain electrodes, the width of the region between some of the adjacent pairs of the transistors not combined into a common electrode, the number  
15 of transistors, and the smallest number of routes. A layout determination section forms information on a layout in which all the source, drain and gate electrodes of the transistor included in the circuit are placed in a small-width region having the determined width.